

RMG ALLOY STEEL LIMITED



*Crafting
innovation*



RMG

About RMG Alloy Steel

RMG Alloy Steel Ltd , formerly known as REMI METALS GUJARAT Ltd is an ISO 9001:2008 & TS: 16949 accredited company with an existence of more than two decades as a trusted partner to all major OEM's across the globe catering to their various requirements.

We are a steel plant with 150,000 MT annual cast production capacity in Bharuch, Gujarat producing various grades of carbon, alloy and martensitic stainless steel. Alloy Steel is produced through the Electric Arc Furnace (EAF) route with a heat size of 35 tons & Ladle Refining Furnace (LRF). Vacuum degassing (VD/VOD) is done for all our heats and the product is cast through two routes: continuous cast and ingot route.

Equipped with a high precision rolling mill downstream with a capacity of 125,000 MT annually RMG can cater to a wide size range of 28 mm to 200 mm diameter. Besides the billet & rolled products we are also catering to various value added applications like Precision Rolled bars, Peeled & Ground Bars and Heat treated / annealed products

It is one of the very few steel plants in India to be housing an NABL accredited testing facility and is equipped to meet the most stringent testing requirements & deliver our products.

In our philosophy, Quality is embedded into the product right at the start and is strengthened throughout the value chain. Our emphasis is on engineering the best quality of alloy steel which our users can forge superior products out of & which are benchmarked globally. The Steel we produce here finds its way into high quality conscious global markets for applications like Oil & Gas, Energy, Auto etc because of the consistency in the quality of our product & the reliability in our supplies which has fostered our relationships with all our stakeholders over the last two decades.



Our Presence

Location: Jhagadia, Bharuch, Gujarat, India.

Nearest Sea Port:

- NhavaSheva, Mumbai – 350 Km
- Dahej, Gujarat – 70 Km
- Kandla, Gujarat – 500 Km
- Mundra, Gujarat – 545 Km

Nearest Airport: Baroda – 65 kms

- Established : 1995
- Steel capacity : 1,50,000 MTPA
- Products: Carbon, Alloy & Special Quality Steel
- Area : Spread across 150 Acres

Welspun Group has a strategic investment in RMG Alloy Steel Ltd.

The US\$ 3 billion Welspun Group is one of India's fastest growing conglomerates having registered a CAGR of 30% over the last decade. The Group has a strong foothold in more than 50 Countries, employs over 24,000 people and has as many as 100,000+ shareholders.

Ranked 1st among Home Textile Suppliers in the US.

2nd Largest Large Diameter Pipe Company in the world

India's Largest Solar Independent Power Producer (IPP)

Strong Business relationship with most of the Fortune 100 Companies in Retail and Oil & Gas sector.

WELSPUN





Plant Facilities

Steel Melting Shop:

- ✓ 35 Mt Electric Arc Furnace
- ✓ Ladle Refining Furnace
- ✓ Vacuum Degasser / Vacuum Oxygen Decarburization
- ✓ Continuous Casting
- ✓ Ingot Casting

Rolling Mill:

- ✓ Blooming Mill
- ✓ Bar Mill

Heat Treatment Shop:

- ✓ 35MT Gas Fired Bogie Hearth Furnace
- ✓ 2 x 15 MT Electrical Furnaces
- ✓ 2 TPH Gas/Electric continuous furnace
- ✓ 4 TPH Gas/Electric continuous furnace

Bright Bar:

- ✓ Peeling, Centerless Grinding;
- ✓ Cold drawn
- ✓ Pilgering Machines

Non Destructive Techniques:

- ✓ Magnetic Particle Inspection
- ✓ Eddy Current Testing
- ✓ Automatic line Ultra Sound Testing



Key Testing Facilities

- ✓ ARL-3460 Spectrometers (29 & 33 Channels)
- ✓ LECO H2, O2, N2 Analyser & LECO C-S Analyser
- ✓ 100T Universal Testing Machine- FIE Make
- ✓ Impact Testing Machine (0-300J) – FIE Make
- ✓ Metallurgical Microscope (up to 1500X) with image projection facilities- SEIWA Make
- ✓ Rockwell Hardness tester
- ✓ Jominy Testing Apparatus
- ✓ Portable Ultrasonic Flaw detector (EEC Make)
- ✓ Micro RAD Radiation Survey Meter- Pulsecho systems.
- ✓ Wet Analysis Lab

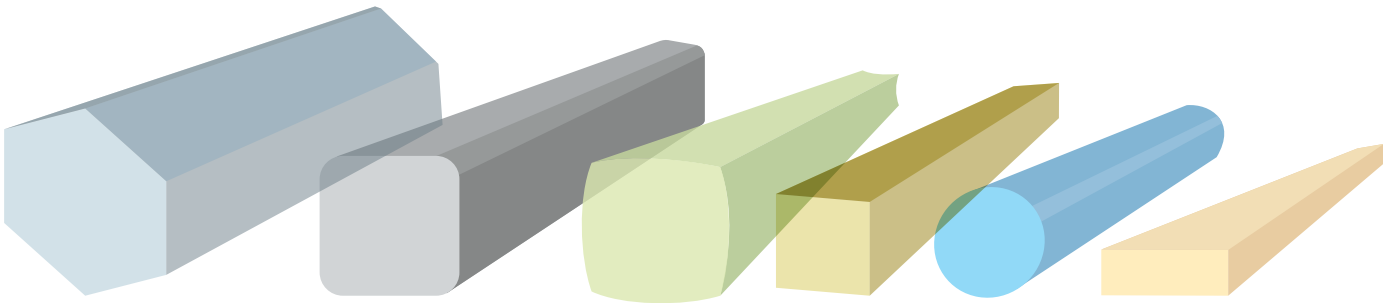


Product Profile

Steel Grades :	(Illustrative List)
Bearing Steel	SAE 52100, SKF Gr3, 100Cr6,100CrMnSi64,100CrMn6,100CrMo7,Gr 24, Gr 24K, Gr70K, 3310
Chrome – Moly Steel	4140,42CrMo4,4145,4135etc
Case Carburizing steel	20MnCr5, 8620,8619,8622,8625,8627,8822etc
Micro alloyed steel	38MnSiVS6, C70S6 etc
Creep Resistant steel	F11, F22, F12, F5, F9, F91, F1, F5, F92
Valve Steel	En52, 21-4N
Boron Steel	15B22, 15B41, 43B17, 94B17H, 20MnCr5(B)
High Nickel Steel	En36C/1-9NiCrMo4, 18X2H4BA, 20X2H4A, 5HS64, SAE9310
Stainless Steel	SS-410, SS-420, L80 13Cr, 9Cr, 416, 440C, 304L, 316L
Tool & Die Steel	H11, H13, Din 1.2714, AISI O1, S7

Cast Products

Cast Bloom	Square – 150 x 150 mm Rectangular – 280 x 350 mm Octagon – 198,232,262,308 mm (Crest to Crest)
Cast Ingot	Square : 2 Mt, 3Mt, Polygon: 6 Mt, 10 Mt, 16 Mt, 17Mt, 30 Mt, Round : 600 mm, 700 mm



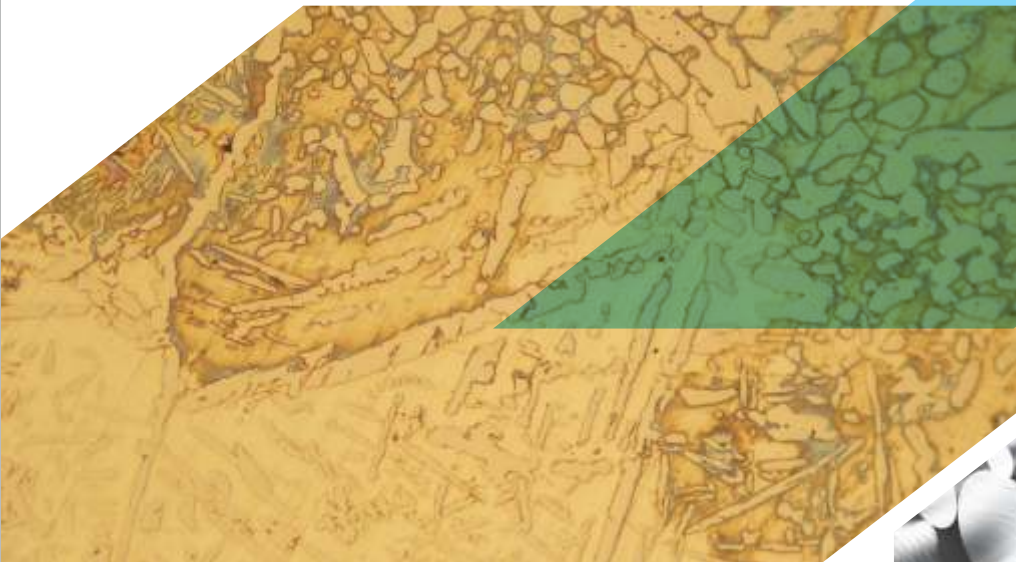
Rolled Products

Round (mm dia)	20, 22, 25, 28, 30, 32, 34, 36, 38, 40, 42, 45, 48, 50, 55, 56, 58, 60, 63, 65, 68, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150, 160, 170, 180, 200
RCS (mm side)	55, 63, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 120, 125, 130, 140, 150, 155, 180, 200, 220, 250, 300, 340
Flats	Width : 20 – 100 mm Thickness : 5 - 34 mm
Square (mm Sq)	14, 16, 18, 20, 21, 22, 24, 25, 27, 30, 34, 38, 40, 42, 47, 53
Hexagon (mm)	16, 18, 20, 22, 23, 25, 27, 28, 30, 32, 34, 38, 39, 40, 43, 44, 48, 53, 58 across flat
Wire Rod (mm dia) (Outsourced)	4.5, 5.5, 6, 6.7, 7, 8, 8.2, 8.5, 9, 10, 10.5, 11, 11.4, 12, 12.4, 12.5, 12.8, 13.1, 13.3, 14, 15, 16, 17, 17.3, 18, 18.3, 19, 20, 21, 22, 23.2, 24, 25, 26

Dimensional Tolerances are as per IS : 3739 -1987

Heat Treated Products

Annealed	Hardened (Quench) & Tempered
Spheroidised Annealed	Solution Annealed
Normalized	Normalized& Tempered
Soft Annealed (Stress Relieved)	



Bright Bars

Turned Bars	100 – 200 mm Dia
Peeled & Ground Bars	30 – 140 mm Dia Peeled Bar; 30 -80 mm Dia Peeled & Ground
Cold Drawn Bars	15 – 80 mm Dia



Value Added Products

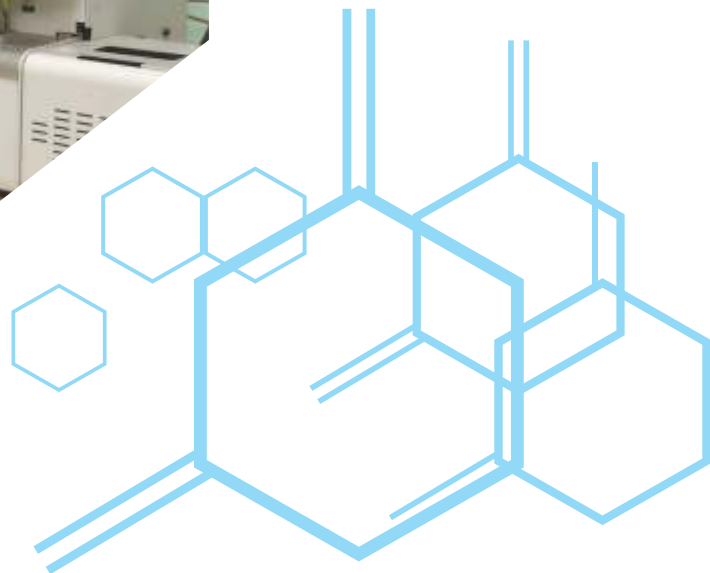
Drilled Bars ID	15 -65 mm and OD up to 160 mm; length upto700 mm max
Extra Long Bars	Lengths up 10 ~ 17 mtr in annealed and quench & tempered condition
Precision Rolled Black Bars (PRBB)	30 – 65 mm Dia Bar with tolerance upto 100 microns
Precision Seamless Tubes / Pipes : OD:	25- 168 mm; WT: 3-18 mm Cold Drawn, Shaped Tubes, Pilgered Tubes

INGOT TYPE	SHAPE	INGOT WEIGHT	INGOT DIMENSIONS		LENGTH
		Kgs	Top (mm)	Bottom (mm)	(mm)
M2	Square	2000	465	385	1525
M3	Square	2800	482	432	1800
M3.7	Square	3700	575	450	1808
M6	Polygonal (8 face)	6700	790	660	1575
M9	Polygonal (8 face)	10200	975	800	1850
M14	Polygonal (12 face)	14022	1175	955	1680
M17	Polygonal (12 face)	16040	1280	1050	1900
M30	Polygonal (12 face)	30500	1590	1320	2200
600	Round	8400	600	600	3800
700	Round	11200	700	700	3700



Metallurgical Capabilities

Chemical Composition	All major elements are controlled and tested; Bi, Te, Ta, Nb, Soluble /Insoluble Al & B are also checked. Sulphurlevels -Normal Steel -0.010 % max ; Low 'S' Steel - 0.002% max; Re-Sulphurising Steel 0.010 – 0.100% max
Gas Level	General : H 2 <= 2 PPM;N2 <= 70 ppm Special Applications : Ni <= 1000 PPM ; O2 <= 15 PPM ; O2<=6 PPM for special cleanliness quality Steel.
Non Destructive Test	Surface inspection by MPI/Eddy Current/ Pickling; Internal Soundness by Portable Ultrasonic Tester/ Off line Auto UT
Destructive Test	Hardenability Test; Creep Test, Tensile Test
Microscopic examination	Grain Size (ASTM E112), Inclusion Rating (ASTM E45), % degree of spheroidisation, Carbide precipitation
Macroscopic examination	Macro etch (ASTM E381), Grain Flow, Hydrogen flakes, Chill zone, Equiaxed zone, Porosity



Steel for Applications

	Auto Components Steering Worm, RA Shaft, Steering Shaft, Camshaft, Bevel gear, RAS Gear, Steering Nut, Transmission Gear, Crown Wheel, FA Beam, Stub Axle, Crankshaft, Connecting Rod, Engine Valve & Stabilizer Bar.
	Gear Components and Transmission Transmission Gears & Shafts, Engine Gears, Clutch Components, Differential & Axle Gears, Synchro Hubs & Gears. Crown Gear, Worm Gear, Spur Gear, Helical Gear, Bevel, Rack & Pinion, Ring Gears etc.
	Bearing Industries Inner Ring, Outer Ring, Balls, Rollers for Various Bearings like Ball Bearing, Roller Bearing & Thrust Ball bearing etc.
	Defense Various Parts for Battle Tank, Bomb Shell, Gun Barrel, Small Arms Barrels, Cartridge Cases & Armored Vehicle Component.
	Oil & Gas Shafts, Casing, Open Forge , Valve Bodies, Interconnecting Blocks & Drill Shanks
	Power Sector Drive Shafts, Rotor Shaft, Rotor Disc, Rings, Flanges & Turbine Blade.
	Heavy Engineering Various Component in Sugar, Textile, Cement, Mining, Construction & Marine.
	Off Road Vehicle Under Carriage Parts – Linkage Pin, Track Shoe, Track Roller, Idler Shaft, Various Nitride & Carburized parts.
	Railways Axle Shaft, Camshaft & Helical Spring.

We believe the steps we have taken to date, and our resolve to make inroads in community development, women empowerment, education environment and health, employee development and our unique initiative ‘Swachh Welspun Abhiyan’, will pave the way towards sustainable socio-economic growth for Welspun and the communities that we are responsible for.

EMPOWERMENT EDUCATION ENVIRONMENT



Quality Benchmark

ISO 9001 : 2008

ISO/ TS 16949: 2008

Certificate of Accreditation by NABL for Chemical, Mechanical & NDT, ISO / IEC
17025 : 2005

Well Known Steel Maker – India Boiler Regulations (IBR) approved



RMG

Works:

RMG Alloy Steel Ltd,
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Gujarat, India.

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Visit us at:

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